ADVANCED DESIGN OF RCC STRUCTURES

Subject Code	**: 14CSE12**	IA Marks	: 50
No. of Lecture Hrs./ Week	: 04	Exam Hrs	: 03
Total No. of Lecture Hrs.	: 50	Exam Marks	: 100

Objectives:

The objectives of this course is to make students to learn principles of Structural Design, To design different types of structures and to detail the structures. To evaluate performance of the structures.

Course Outcomes: On completion of this course, students are able to

- **Achieve Knowledge of design and development of problem solving skills.**
- **Understand the principles of Structural Design**
- **Design and develop analytical skills.**
- **Summarize the principles of Structural Design and detailing**
- **Understands the structural performance.**

1. Yield line method of design of slabs. Design of flat slabs.
2. Design of grid floors.
3. Design of continuous beams with redistribution of moments
4. Design of Chimneys, Design of silos and bunkers.
5. Art of detailing earthquake resistant structures. Expansion and contraction joints

REFERENCE BOOKS:

1. A Park and Paulay, **"Reinforced Reinforced and Prestressed Concrete**"
2. Lin TY and Burns N H, "**Reinforced Concrete Design**".
3. Kong KF and Evans T H "**Design of Prestressed Concrete Structures**
4. P.C.Varghese, "**Advanced Reinforced Concrete Design**", Prentice-Hall of India, New Delhi, 2005.
5. Dr.B.C.Punmia, Ashok Kumar Jain and Arun Kumar Jain, **"Comprehensive RCC Design"**